

# Work Order ID 90577

\*90577\*

Wednesday, September 19, 2012 11:55:42 A

Page 1

*Ship today*

Item ID: D412-698-035

Accept

\*N9000040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Door Handle

Start Date: 9/19/2012 Start Qty: 1.00

\*1\*

Cust Item ID:

Required Date: 9/19/2012 Req'd Qty: 1.00

\*1\*

Customer:

*DHL*

Reference:

Approvals: Process Plan: *MMK*

Date: *12-09-19*

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start \*NR1\*

Stop \*NR2\*

| Sequence ID/<br>Work Center ID | Operation<br>Description | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

Draw Nbr

Revision Nbr

IIN D412-698

Rev E

100

0.00

\*100\*

DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy bluefile & type labels per PPP D412-698-032

CHG001

*DAS 16 12/09/19 JB*

*MCS 12409-19*

110

Pick Kit

0.00

\*110\*

Packaging

Memo

0.00

Packaging

*12/09/19 JB*

120

QC4- 100% Inspect kits for completeness

0.00

\*120\*

QC

Memo

0.00

Quality Control

*DAS 16 12/09/19 JB*

*70*

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

|  |   |   |                                      |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
|--|---|---|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|----------------------------------|--|------------------------------------|--|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Work Order Update <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/>   | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> |  |
| Skid-tube <input type="checkbox"/>                           | Crosstube <input type="checkbox"/>  | Water Jet <input type="checkbox"/>  | Engineering <input type="checkbox"/> |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Machining <input type="checkbox"/>                           | Small Fab <input type="checkbox"/>  | Prod. Eng. Coord. <input type="checkbox"/>  | Quality <input type="checkbox"/>     |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Thermoforming <input type="checkbox"/>                       | Finishing <input type="checkbox"/>  | Rec/Store/Packaging <input type="checkbox"/>  | Other <input type="checkbox"/>       |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Large Fab <input type="checkbox"/>                           | Composite <input type="checkbox"/>  | Supplier <input type="checkbox"/>   |                                      |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |

| Root Cause    | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---------------|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Doc/Data      |      |      |     |   |                   |                    |             |              |              |
| Equip/Tooling |      |      |     |   |                   |                    |             |              |              |
| Operator      |      |      |     |   |                   |                    |             |              |              |
| Material      |      |      |     |   |                   |                    |             |              |              |
| Setup         |      |      |     |   |                   |                    |             |              |              |
| Other         |      |      |     |   |                   |                    |             |              |              |
| Process       |      |      |     |   |                   |                    |             |              |              |
| Supplier      |      |      |     |   |                   |                    |             |              |              |
| Training      |      |      |     |   |                   |                    |             |              |              |
| Unapproved    |      |      |     |   |                   |                    |             |              |              |

**FAULT CATEGORY**

| Landing Gear  | General                                 | Other  |
|---|---|--|
| <input type="checkbox"/> Bending                      | <input type="checkbox"/> Bend           | <input type="checkbox"/> Grain                           |
| <input type="checkbox"/> Centre Not Concentric to O/S | <input type="checkbox"/> BOM/Route      | <input type="checkbox"/> Hardware                        |
| <input type="checkbox"/> Cracks                       | <input type="checkbox"/> Broken/Damaged | <input type="checkbox"/> Inspection Incomplete           |
| <input type="checkbox"/> Crushed/Crimped              | <input type="checkbox"/> Burrs          | <input type="checkbox"/> Instructions Incomplete/Unclear |
| <input type="checkbox"/> Cuffs                        | <input type="checkbox"/> Contamination  | <input type="checkbox"/> Maintenance                     |
| <input type="checkbox"/> Heat Treat                   | <input type="checkbox"/> Countersink    | <input type="checkbox"/> Mislabeled                      |
| <input type="checkbox"/> Inspection Strip in Tube     | <input type="checkbox"/> Cut Too Short  | <input type="checkbox"/> Misread                         |
| <input type="checkbox"/> Ripples in Bend              | <input type="checkbox"/> Drill Holes    | <input type="checkbox"/> Offset                          |
| <input type="checkbox"/> Torque Waves in Extrusion    | <input type="checkbox"/> Drawing        | <input type="checkbox"/> Out of Calibration              |
| <input type="checkbox"/> Turning Sequence             | <input type="checkbox"/> Finish         | <input type="checkbox"/> Out of Sequence                 |
| <input type="checkbox"/> Wave/Twist in Tube           | <input type="checkbox"/> Folio          | <input type="checkbox"/> Outside Dimensions              |
|   |   | <input type="checkbox"/> Ovalized                        |
|   |   | <input type="checkbox"/> Over/Under tolerance            |
|   |   | <input type="checkbox"/> Part Incorrect                  |
|   |   | <input type="checkbox"/> Part Lost/Missing               |
|   |   | <input type="checkbox"/> Part Moved                      |
|   |   | <input type="checkbox"/> Positioned Wrong                |
|   |   | <input type="checkbox"/> Power Loss/Surge                |
|   |   | <input type="checkbox"/> Pressure/Forced                 |
|   |   | <input type="checkbox"/> Temperature/Cure                |
|   |   | <input type="checkbox"/> Weld                            |
|   |   | <input type="checkbox"/> Wrong Stock Pulled              |
|   |   | <input type="checkbox"/> Other                           |

# Work Order ID 90577

**\*90577\***

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Item ID: D412-698-035 Accept **\*N900040100\*** Setup Start **\*NS1\***  
 Revision ID: Stop **\*NS2\***  
 Item Name: Door Handle  
 Start Date: 9/19/2012 Start Qty: 1.00 **\*1\*** Cust Item ID:  
 Required Date: 9/19/2012 Req'd Qty: 1.00 **\*1\*** Customer:  
 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

| Sequence ID/<br>Work Center ID | Operation<br>Description  | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|---|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 130                            | Packaging   | 0.00                 |         |        |              |               |               |                  |                |
| <b>*130*</b>                   |   |                      |         |        |              |               |               |                  |                |
| Packaging                      | Memo  | 0.00                 |         |        |              |               |               |                  |                |
| Packaging                      | Identify and pack for shipping as per PPP D412-698-035 Location: _____ PPP Rev: _____ |                      |         |        |              |               |               |                  |                |
|                                |   |                      |         |        |              |               |               |                  |                |
| 140                            | QC21- Final Inspection - Work Order Release   | 0.00                 |         |        |              |               |               |                  |                |
| <b>*140*</b>                   |   |                      |         |        |              |               |               |                  |                |
| QC                             | Memo  | 0.00                 |         |        |              |               |               |                  |                |
| Quality Control                |   |                      |         |        |              |               |               |                  |                |

*Signature* (1)

MLJ 12-09-19

*Signature*  
12-09-19

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

|  |             |             |            |   |                          |   |                        |                     |                     |  |  |
|--|-------------|-------------|------------|---|--------------------------|---|------------------------|---------------------|---------------------|--|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ |             |             |            | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Work Order Update <input type="checkbox"/> |                          | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/><br/>           Machining <input type="checkbox"/><br/>           Thermoforming <input type="checkbox"/><br/>           Large Fab <input type="checkbox"/> </div> <div>           Crosstube <input type="checkbox"/><br/>           Small Fab <input type="checkbox"/><br/>           Finishing <input type="checkbox"/><br/>           Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/><br/>           Prod. Eng. Coord. <input type="checkbox"/><br/>           Rec/Store/Packaging <input type="checkbox"/><br/>           Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/><br/>           Quality <input type="checkbox"/><br/>           Other <input type="checkbox"/> </div> </div> |                        |                     |                     |  |  |
| <b>Root Cause</b>  | <b>Date</b> | <b>Step</b> | <b>Qty</b> | <b>Description of work order update or Non-conformance</b>  | <b>Initial Chief Eng</b> | <b>Action Description</b>   | <b>Sign &amp; Date</b> | <b>Verification</b> | <b>QC Inspector</b> |  |  |
| Doc/Data <input type="checkbox"/>                            |             |             |            |   |                          |   |                        |                     |                     |  |  |
| Equip/Tooling <input type="checkbox"/>                       |             |             |            |   |                          |   |                        |                     |                     |  |  |
| Operator <input type="checkbox"/>                            |             |             |            |   |                          |   |                        |                     |                     |  |  |
| Material <input type="checkbox"/>                            |             |             |            |   |                          |   |                        |                     |                     |  |  |
| Setup <input type="checkbox"/>                               |             |             |            |   |                          |   |                        |                     |                     |  |  |
| Other <input type="checkbox"/>                               |             |             |            |   |                          |   |                        |                     |                     |  |  |
| Process <input type="checkbox"/>                             |             |             |            |   |                          |   |                        |                     |                     |  |  |
| Supplier <input type="checkbox"/>                            |             |             |            |   |                          |   |                        |                     |                     |  |  |
| Training <input type="checkbox"/>                            |             |             |            |   |                          |   |                        |                     |                     |  |  |
| Unapproved <input type="checkbox"/>                          |             |             |            |   |                          |   |                        |                     |                     |  |  |

| FAULT CATEGORY   |   |   |   |  |
|--|---|---|---|--|
| <b>Landing Gear</b><br><input type="checkbox"/> Bending<br><input type="checkbox"/> Centre Not Concentric to O/S<br><input type="checkbox"/> Cracks<br><input type="checkbox"/> Crushed/Crimped.<br><input type="checkbox"/> Cuffs<br><input type="checkbox"/> Heat Treat<br><input type="checkbox"/> Inspection Strip in Tube<br><input type="checkbox"/> Ripples in Bend<br><input type="checkbox"/> Torque Waves in Extrusion<br><input type="checkbox"/> Turning Sequence<br><input type="checkbox"/> Wave/Twist in Tube | <b>General</b><br><input type="checkbox"/> Bend<br><input type="checkbox"/> BOM/Route<br><input type="checkbox"/> Broken/Damaged<br><input type="checkbox"/> Burrs<br><input type="checkbox"/> Contamination<br><input type="checkbox"/> Countersink<br><input type="checkbox"/> Cut Too Short<br><input type="checkbox"/> Drill Holes<br><input type="checkbox"/> Drawing<br><input type="checkbox"/> Finish<br><input type="checkbox"/> Folio | <input type="checkbox"/> Grain<br><input type="checkbox"/> Hardware<br><input type="checkbox"/> Inspection Incomplete<br><input type="checkbox"/> Instructions Incomplete/Unclear<br><input type="checkbox"/> Maintenance<br><input type="checkbox"/> Mislabeled<br><input type="checkbox"/> Misread<br><input type="checkbox"/> Offset<br><input type="checkbox"/> Out of Calibration<br><input type="checkbox"/> Out of Sequence<br><input type="checkbox"/> Outside Dimensions | <input type="checkbox"/> Ovalized<br><input type="checkbox"/> Over/Under tolerance<br><input type="checkbox"/> Part Incorrect<br><input type="checkbox"/> Part Lost/Missing<br><input type="checkbox"/> Part Moved<br><input type="checkbox"/> Positioned Wrong<br><input type="checkbox"/> Power Loss/Surge<br><br><input type="checkbox"/> Pressure/Forced<br><input type="checkbox"/> Temperature/Cure<br><input type="checkbox"/> Weld<br><input type="checkbox"/> Wrong Stock Pulled<br><br><input type="checkbox"/> Other |  |

# Picklist Print

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Page 1

Work Order ID: 90577

Parent Item: D412-698-035

Parent Item Name: Door Handle

Start Date: 9/19/2012

Required Date: 9/19/2012

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:A New Issue 08.07.03 EC verified by:LL

| Component Item ID/<br>Item Name | Replacement<br>Item ID | Mfg/<br>Purch | Bin<br>Item | Primary<br>Location | Last<br>Location | Route<br>Seq ID | Unit of<br>Measure | Qty on<br>Hand | Qty per Kit | Total<br>Qty | Qty<br>Issued | Date<br>Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|

AN525-832R8

Purchased

No

120

Each

114.0000

12

12

✓

20

screw

Location

Loc Qty

Loc Code

ST345

14

108583

1

120308

13

T344

100

122814

100

120308

AN960JD10L

NAS1149D0332J

Purchased

No

120

Each

0.0000

12

12

✓

20

Washer

D3779-041

Manufactured

No

120

Each

4.0000

2

2

✓

20

Handle Assembly (Exterior)

Location

Loc Qty

Loc Code

ST234

4

87481

4

87481

D3779-043

Manufactured

No

120

Each

3.0000

2

2

✓

20

Handle Assembly (Interior)

Location

Loc Qty

Loc Code

ST081

-3

ST234

3

77168

1

87507

2

77168

81507

ST234A

3

120

Each

8.0000

2

2

✓

20

12/09/19

D3779-3

Plate

Location

Loc Qty

Loc Code

ST062

8

81539

5

83189

3

81539

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

|   |                                    |  |   |   |                      |   |                |              |   |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
|---|------------------------------------|--|---|---|----------------------|---|----------------|--------------|---|--|--|------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|----------------------------------|--|------------------------------------|--|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____  |                                    |  |   | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Work Order Update <input type="checkbox"/> |                      | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><table style="width: 100%; border: none;"> <tr> <td style="width: 25%;">Skid-tube <input type="checkbox"/></td> <td style="width: 25%;">Crosstube <input type="checkbox"/></td> <td style="width: 25%;">Water Jet <input type="checkbox"/></td> <td style="width: 25%;">Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> |                |              |   |  |  | Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> |  |
| Skid-tube <input type="checkbox"/>  | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/>           | Engineering <input type="checkbox"/>  |   |                      |   |                |              |   |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Machining <input type="checkbox"/>  | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/>   | Quality <input type="checkbox"/>  |   |                      |   |                |              |   |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Thermoforming <input type="checkbox"/>  | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/>  |   |                      |   |                |              |   |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Large Fab <input type="checkbox"/>  | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/>            |   |   |                      |   |                |              |   |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| <b>Root Cause</b>   | Date                               | Step   | Qty   | Description of work order update<br>or Non-conformance  | Initial<br>Chief Eng | Action<br>Description   | Sign &<br>Date | Verification | QC Inspector  |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Doc/Data <input type="checkbox"/>   |                                    |  |   |   |                      |   |                |              |   |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Equip/Tooling <input type="checkbox"/>  |                                    |  |   |   |                      |   |                |              |   |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Operator <input type="checkbox"/>   |                                    |  |   |   |                      |   |                |              |   |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Material <input type="checkbox"/>   |                                    |  |   |   |                      |   |                |              |   |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Setup <input type="checkbox"/>  |                                    |  |   |   |                      |   |                |              |   |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Other <input type="checkbox"/>  |                                    |  |   |   |                      |   |                |              |   |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Process <input type="checkbox"/>  |                                    |  |   |   |                      |   |                |              |   |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Supplier <input type="checkbox"/>   |                                    |  |   |   |                      |   |                |              |   |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Training <input type="checkbox"/>   |                                    |  |   |   |                      |   |                |              |   |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Unapproved <input type="checkbox"/>   |                                    |  |   |   |                      |   |                |              |   |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| <b>FAULT CATEGORY</b>   |                                    |  |   |   |                      |   |                |              |   |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| <b>Landing Gear</b><br><input type="checkbox"/> Bending<br><input type="checkbox"/> Centre Not Concentric to O/S<br><input type="checkbox"/> Cracks<br><input type="checkbox"/> Crushed/Crimped<br><input type="checkbox"/> Cuffs<br><input type="checkbox"/> Heat Treat<br><input type="checkbox"/> Inspection Strip in Tube<br><input type="checkbox"/> Ripples in Bend<br><input type="checkbox"/> Torque Waves in Extrusion<br><input type="checkbox"/> Turning Sequence<br><input type="checkbox"/> Wave/Twist in Tube |                                    |  | <b>General</b><br><input type="checkbox"/> Bend<br><input type="checkbox"/> BOM/Route<br><input type="checkbox"/> Broken/Damaged<br><input type="checkbox"/> Burrs<br><input type="checkbox"/> Contamination<br><input type="checkbox"/> Countersink<br><input type="checkbox"/> Cut Too Short<br><input type="checkbox"/> Drill Holes<br><input type="checkbox"/> Drawing<br><input type="checkbox"/> Finish<br><input type="checkbox"/> Folio |   |                      | <input type="checkbox"/> Grain<br><input type="checkbox"/> Hardware<br><input type="checkbox"/> Inspection Incomplete<br><input type="checkbox"/> Instructions Incomplete/Unclear<br><input type="checkbox"/> Maintenance<br><input type="checkbox"/> Mislabeled<br><input type="checkbox"/> Misread<br><input type="checkbox"/> Offset<br><input type="checkbox"/> Out of Calibration<br><input type="checkbox"/> Out of Sequence<br><input type="checkbox"/> Outside Dimensions   |                |              | <input type="checkbox"/> Ovalized<br><input type="checkbox"/> Over/Under tolerance<br><input type="checkbox"/> Part Incorrect<br><input type="checkbox"/> Part Lost/Missing<br><input type="checkbox"/> Part Moved<br><input type="checkbox"/> Positioned Wrong<br><input type="checkbox"/> Power Loss/Surge<br><input type="checkbox"/> Pressure/Forced<br><input type="checkbox"/> Temperature/Cure<br><input type="checkbox"/> Weld<br><input type="checkbox"/> Wrong Stock Pulled<br><input type="checkbox"/> Other |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |

# Picklist Print

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Work Order ID: 90577

Parent Item: D412-698-035

Parent Item Name: Door Handle

Start Date: 9/19/2012

Required Date: 9/19/2012

Start Qty: 1.00

Required Qty: 1.00

MS2104213

Nut

Purchased

No

120

Each

2,645.0000

12

12

JB

Location

Loc Qty

Loc Code

316

719

122452

719

ST300

574

117885

32

119017

404

119075

138

ST317

1352

122141

1352

122141

Purchased

No

120

Each

53.0000

12

12

JB

12/09/19

MS24694-S5

Screw

Location

Loc Qty

Loc Code

ST289A

53

116540

6

120308

47

120308

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

|  |      |      |     |   |                   |   |             |              |              |  |  |
|--|------|------|-----|---|-------------------|---|-------------|--------------|--------------|--|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ |      |      |     | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Work Order Update <input type="checkbox"/> |                   | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/><br/>           Machining <input type="checkbox"/><br/>           Thermoforming <input type="checkbox"/><br/>           Large Fab <input type="checkbox"/> </div> <div>           Crosstube <input type="checkbox"/><br/>           Small Fab <input type="checkbox"/><br/>           Finishing <input type="checkbox"/><br/>           Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/><br/>           Prod. Eng. Coord. <input type="checkbox"/><br/>           Rec/Store/Packaging <input type="checkbox"/><br/>           Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/><br/>           Quality <input type="checkbox"/><br/>           Other <input type="checkbox"/> </div> </div> |             |              |              |  |  |
| <b>Root Cause</b>  | Date | Step | Qty | Description of work order update or Non-conformance   | Initial Chief Eng | Action Description  | Sign & Date | Verification | QC Inspector |  |  |
| Doc/Data <input type="checkbox"/>                            |      |      |     |   |                   |   |             |              |              |  |  |
| Equip/Tooling <input type="checkbox"/>                       |      |      |     |   |                   |   |             |              |              |  |  |
| Operator <input type="checkbox"/>                            |      |      |     |   |                   |   |             |              |              |  |  |
| Material <input type="checkbox"/>                            |      |      |     |   |                   |   |             |              |              |  |  |
| Setup <input type="checkbox"/>                               |      |      |     |   |                   |   |             |              |              |  |  |
| Other <input type="checkbox"/>                               |      |      |     |   |                   |   |             |              |              |  |  |
| Process <input type="checkbox"/>                             |      |      |     |   |                   |   |             |              |              |  |  |
| Supplier <input type="checkbox"/>                            |      |      |     |   |                   |   |             |              |              |  |  |
| Training <input type="checkbox"/>                            |      |      |     |   |                   |   |             |              |              |  |  |
| Unapproved <input type="checkbox"/>                          |      |      |     |   |                   |   |             |              |              |  |  |

| FAULT CATEGORY   |   |   |   |
|--|---|---|---|
| <b>Landing Gear</b><br><input type="checkbox"/> Bending<br><input type="checkbox"/> Centre Not Concentric to O/S<br><input type="checkbox"/> Cracks<br><input type="checkbox"/> Crushed/Crimped.<br><input type="checkbox"/> Cuffs<br><input type="checkbox"/> Heat Treat<br><input type="checkbox"/> Inspection Strip in Tube<br><input type="checkbox"/> Ripples in Bend<br><input type="checkbox"/> Torque Waves in Extrusion<br><input type="checkbox"/> Turning Sequence<br><input type="checkbox"/> Wave/Twist in Tube | <b>General</b><br><input type="checkbox"/> Bend<br><input type="checkbox"/> BOM/Route<br><input type="checkbox"/> Broken/Damaged<br><input type="checkbox"/> Burrs<br><input type="checkbox"/> Contamination<br><input type="checkbox"/> Countersink<br><input type="checkbox"/> Cut Too Short<br><input type="checkbox"/> Drill Holes<br><input type="checkbox"/> Drawing<br><input type="checkbox"/> Finish<br><input type="checkbox"/> Folio | <input type="checkbox"/> Grain<br><input type="checkbox"/> Hardware<br><input type="checkbox"/> Inspection Incomplete<br><input type="checkbox"/> Instructions Incomplete/Unclear<br><input type="checkbox"/> Maintenance<br><input type="checkbox"/> Mislabeled<br><input type="checkbox"/> Misread<br><input type="checkbox"/> Offset<br><input type="checkbox"/> Out of Calibration<br><input type="checkbox"/> Out of Sequence<br><input type="checkbox"/> Outside Dimensions | <input type="checkbox"/> Ovalized<br><input type="checkbox"/> Over/Under tolerance<br><input type="checkbox"/> Part Incorrect<br><input type="checkbox"/> Part Lost/Missing<br><input type="checkbox"/> Part Moved<br><input type="checkbox"/> Positioned Wrong<br><input type="checkbox"/> Power Loss/Surge<br><input type="checkbox"/> Pressure/Forced<br><input type="checkbox"/> Temperature/Cure<br><input type="checkbox"/> Weld<br><input type="checkbox"/> Wrong Stock Pulled<br><input type="checkbox"/> Other |



## 8.0 PARTS LIST - CABIN DOOR MODIFICATION KITS

(FOR AIRCRAFT EQUIPPED WITH P/N 412-030-300-XXX COMPOSITE DOORS)

| Qty<br>-019 | Qty<br>-021 | Qty<br>-031 | Qty<br>-032 | Qty<br>-033 | Qty<br>-035 | Part Number  | Description                |
|-------------|-------------|-------------|-------------|-------------|-------------|--------------|----------------------------|
| X           |             |             |             |             |             | D412-698-019 | BEARING OVERHAUL KIT       |
|             | X           |             |             |             |             | D412-698-021 | REPLACEMENT SHIM KIT       |
|             |             | X           |             |             |             | D412-698-031 | CABIN DOOR ROLLER KIT, LH  |
|             |             |             | X           |             |             | D412-698-032 | CABIN DOOR ROLLER KIT, RH  |
|             |             |             |             | X           |             | D412-698-033 | REPLACEMENT DOOR TRACK KIT |
|             |             |             |             |             | X           | D412-698-035 | DOOR HANDLE KIT            |
| 7           |             |             |             |             |             | D3121-21     | BOLT                       |
| 5           |             |             |             |             |             | D3121-241    | BEARING ASSEMBLY           |
| 1           |             |             |             |             |             | D3137-3      | GUIDE                      |
| 1           |             |             |             |             |             | D3137-5      | WASHER                     |
| 2           |             |             |             |             |             | D3183-045    | BEARING ASSEMBLY           |
|             | 3           |             |             |             |             | D3238-1      | SHIM                       |
|             | 1           |             |             |             |             | D3238-3      | SHIM                       |
|             | 2           |             |             |             |             | D3238-5      | SHIM                       |
|             | 6           |             |             |             |             | D3238-11     | SHIM                       |
|             | 2           |             |             |             |             | D3238-13     | SHIM                       |
|             | 4           |             |             |             |             | D3238-15     | SHIM                       |
|             |             | 1           |             |             |             | D3121-143    | BRACKET ASSEMBLY           |
|             |             |             | 1           |             |             | D3121-144    | BRACKET ASSEMBLY           |
|             |             | 1           | 1           |             |             | D3137-043    | BRACKET ASSEMBLY           |
|             |             | 1           |             |             |             | D3183-043    | BRACKET ASSEMBLY           |
|             |             |             | 1           |             |             | D3183-044    | BRACKET ASSEMBLY           |
|             |             | 1           | 1           | 1           |             | D3202-3      | COVER                      |
|             |             | 3           | 3           |             |             | D3674-041    | BRACKET ASSEMBLY           |
|             |             | 9           | 9           | 9           |             | D3675-1      | BRACKET                    |
|             |             |             |             |             | 2           | D3779-041    | HANDLE ASSEMBLY            |
|             |             |             |             |             | 2           | D3779-3      | PLATE                      |
|             |             |             |             |             | 2           | D3779-043    | HANDLE ASSEMBLY            |
|             |             |             |             |             | 12          | AN525-832R8  | SCREW                      |
|             |             |             |             |             | 12          | AN960JD10L   | WASHER                     |
|             |             |             |             |             | 12          | MS21042L37   | NUT                        |
|             |             |             |             |             | 12          | MS24694-S58  | SCREW                      |
| 1           |             |             |             |             |             | MS24694-S101 | SCREW                      |

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Revision: E

Date: 08.05.01

# **DART SERVICE INSTRUCTION**

TO AMEND INSTALLATION INSTRUCTIONS  
IIN-D412-698 REV. E OR EARLIER AND INSTRUCTIONS FOR  
CONTINUED AIRWORTHINESS ICA-D412-698 REV. 5 OR EARLIER

REF CANADIAN STC: SH92-43

REF FAA STC: SR01446NY

REF EASA STC: EASA.IM.R.S.00709

REF ANAC-BRASIL STC: 2010S10-09

**REFERENCE ONLY**

## **1.0 PURPOSE**

Field installations have shown that the screws used to mount D3779-041 Exterior Door Handles as part of the D412-698-035 Door Handle Kit are too long. The MS24694-S58 screws that were originally provided in the kit should be replaced with MS24694-S51 screws.

## **2.0 CHANGE:**

8.0 PARTS LIST - CABIN DOOR MODIFICATION KITS (IIN-D412-698)

52.18 PARTS LIST - CABIN DOOR MODIFICATION KITS (ICA-D412-698)

| QTY<br>-035 | P/N          | DESCRIPTION     |
|-------------|--------------|-----------------|
| X           | D412-698-035 | DOOR HANDLE KIT |

**IS:**

|    |             |       |
|----|-------------|-------|
| 12 | MS24694-S51 | SCREW |
|----|-------------|-------|

**WAS:**

|    |             |       |
|----|-------------|-------|
| 12 | MS24694-S58 | SCREW |
|----|-------------|-------|

CANADA  
DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-O-01

**APPROVED**

BY: D. Shepherd  
D. SHEPHERD (DE # 02)

DATE: 12.04.26  
CERT. NO.: SH92-43  
ISSUE NO.: 5

|            |             |  |              |
|------------|-------------|--|--------------|
| A          | NEW ISSUE   | RP   | 12.04.26     |
| REV.       | DESCRIPTION | BY   | DATE         |
| DESIGN     | RP          | <b>DART AEROSPACE LTD</b>  |              |
| DRAWN      | RP          | HAWKESBURY, ONTARIO, CANADA  |              |
| CHECKED    | <u>AL</u>   | DRAWING NO.  | REV. A       |
| MFG. APPR. | <u>EE</u>   | DSI 9609   | SHEET 1 OF 2 |
| APPROVED   | <u>JP</u>   | TITLE  | SCALE        |
| DE APPR.   | <u>JP</u>   | EXTERIOR DOOR HANDLE<br>KIT UPDATE   | NTS          |
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